**Confederated Tribes** of the
**Umatilla Indian Reservation**

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October 29, 2012
Via email: RuleUpdate@ecy.wa.gov

Adrienne Dorrah, Toxics Cleanup Program
WA Department of Ecology
P.O. Box 47600
Olympia WA 98504-7600

RE: Proposed Rule Changes to the SMS Rules

Dear Ms. Dorrah:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) offers the following comments on the proposed changes to the Sediment Management Standards (SMS) by Washington Department of Ecology (WDOE).

These comments are intended to integrate CTUIR interest in WDOE updating administrative rules that achieve baseline protections against contaminants in soils and water, which in turn affect tribal first foods, including water and fish. For that purpose, the CTUIR submitted comments on the WDOE Draft Fish Consumption Rate Technical Support Document (Document) in January 2012, and again in Version 2 of the Document in October 2012.

Many of our broader concerns overlap with those detailed by the Columbia River Intertribal Fish Commission, Northwest Indian Fish Commission and the Center for Indian Law and Policy at Seattle University School of Law. Therefore, those comments are incorporated by reference.

The CTUIR appreciates WDOE's acknowledgment that the current SMS are in need of updating. WDOE's proposed SMS rules affect CTUIR interests in taking fish and related species throughout the Columbia River basin, the Columbia River and its tributaries throughout Eastern Washington. Because WDOE's proposed SMS rules broadly affect the CTUIR's interests, government-to-government consultation is recommended. In preparation for such an upcoming consultation, we would request WDOE provide adequate information concerning the broader and technical concerns identified below. We hope that your information will provide adequate information to make an informed analysis and recommendation to CTUIR policy makers.

We understand that this may be an early stage of rulemaking, however, the proposed SMS rules require additional revisions to address the following broad concerns:

- inconsistency with water quality standards that should be a companion to the SMS and consistent with protecting the designated uses of the affected water body;
- lack of baseline numeric standards protective of known fish consumption rates;
- lack of clarity for human health criteria based on minimizing risk to fish consumers,
- absence of cumulative effects analysis;
- treatment of tribal consumption rates as reflected by the Columbia River Intertribal Fish Commission Fish Consumption Rate Study, 1994;
- analysis of the proposed SMS rules on heritage, suppressed (ESA listed) and current fish consumption rates;
- adding feasibility criteria that include tribal, state, federal, non-governmental and non-profit investments into the restoration of resources impacted by sediment contamination, including water quality, habitat restoration, fish restoration for the portions of the Columbia Basin subject to the WDOE proposed SMS rules;
- an explanation of which areas of the Columbia River and Columbia Basin within Washington are not a tribal usual and accustomed fishing site affected by the WDOE proposed SMS rule;

The technical comments are as follows:

1. Section 561- incorporate assumptions and goals that address any state requirement or policy for protecting a certain percentile of the most vulnerable population, or similar criteria, even if it is found with another sister state agency.

2. Section 564 – incorporate a discussion of BCF and BAF (extrapolation from sediment to various trophic levels up the food chain). WAC-173-204-564. Please clarify if you are also considering related comments of the WAC as well as the SMS?

3. Figure 1, human health risk level – explain how these levels compare to know fish consumption rates of CTUIR members, as identified in the Columbia River Intertribal Fish Commission Study;

4. SMS guidelines should include radionuclides. Washington has rivers with radioactive as well as chemical contaminants. Please explain if WDOE will include cancer risks from radionuclides and chemicals and combine to apply to the target risk level. Please clarify the whether the proposed SMS rule includes radionuclides.

5. Lines 18-23. There is a general confusion between 'no adverse impact' and 'minor adverse impact.' The SMS does not seem to set 'no-adverse-effect' or 'no-significant-levels' for benthic or human health. For example, the Macdonald standards are frank effect levels that anticipate adverse benthic or fish community impacts. Line 40 refers to minor adverse impacts. Please clarify if those goals are intended to work independently or in relation to each other:
    a. Line 312 discusses minor adverse impacts. Minor adverse impacts are defined in this section as "significant human health risk as predicted by exceedance of an appropriate chemical, biological, or other deleterious substance standard."

       The relation between minor and significant adverse impacts, screening levels, and risk-based targets due to individual and cumulative contaminant risk is not clear.

    b. Line 347 - (29) "No adverse effects" has some of the same wording as minor adverse effects, above. Please add clarify and add rationale for the treatment of minor and significant adverse affects.

    c. Section (((24))) (45) "Sediment quality standard" means chemical concentration criteria, 430 biological effects criteria, other toxic, radioactive, biological, or deleterious substances criteria, 431 and non-anthropogenically affected sediment quality criteria which are used to identify sediments 432 that have <u>no adverse</u> effects on biological resources per procedures in WAC 173-204-320 433 through 173-204-340.

    *d.* Line 419 concentration or level of biological effects for a contaminant in sediment that is determined by 418 the department to be <u>protective of human health and the environment</u>.

       Please clarify and provide rationale for which sets of criteria subject to "protective of human health and the environment".

6. Line 62 – Please clarify whether this includes dredging, which can re-suspend sediments, or any activity that could affect capped sediments? Please provide examples of how this would be applied to either allow or prohibit future dredging of the Duwamish waterway or other port areas.

7. Line 87ff – Please incorporate anti-degradation policy language for tribal usual and accustomed fishing sites. Please clarify if tribal lands and reservation boundaries include water bodies, will those areas be equally protected, or will the SMS recognize more stringent tribal standards within reservation lands or usual and accustomed areas. Please clarify WDOE's consideration of EPA approved Tribal fish consumption rates and related and lower cumulative risk levels.

8. Line 87ff. Please provide rationale for the inclusion or exclusion of non-point sources such as fertilizers in rivers that then flow into a contaminated harbor or bay?

9. Please explain how WDOE will apply the proposed SMS rule to shared boundary waters such as the Columbia River for Washington and Oregon.

10. Line 127. This line says, "(1) The department shall seek to implement, and as necessary modify this chapter to protect biological resources and human health consistent with WAC 173-204-100(2)." Please explain how subsequent MTCA revisions incorporate new toxicology data or other advancements in best available science.

11. Line 134 and elsewhere. Please clarify if the beneficial water uses for fish and swimming are subordinated to other beneficial uses. Beneficial use is defined so broadly (below) that is would allow almost any use even if it degrades existing quality. For example, industrial use of water could be deemed beneficial, yet result in associated sediment degradation that would likely require institutional controls (line 247) preventing someone else's beneficial use.

    a. Line 242: (((4))) (7) "Beneficial uses" means uses of waters of the state which include ((but are not limited to)) use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state."

12. Line 278. The screening levels should include a provision for cumulative risks to people or biota. As written, individual contaminants could be allowed at 1E-5, the maximum allowed level for individual contaminants. Please clarify that 1E-5 and HI<1 applies to cumulative impacts. Please provide a definition and application of cumulative impacts.

13. Line 330. Add clarification that "natural background" or regional levels should not be allowed to gradually increase over time.

14. Line 389 includes non-point sources as part of the regional background. Explain how will Ecology manage Yakima River combined point and non-point run-off.

15. Clarify if this rule includes microbial agents.

16. Line 401. Sediment is defined as occurring from the ordinary high water mark to the "bottom" of a water body (quotation marks added). Please clarify whether this includes the biologically active zone (see surface sediment definition) as well as underlying layers down to bedrock (for rivers) or some other depth for marine areas.

17. Please add an approach for multiple permitted discharges into the same water bodies that might cause a cumulative exceedance of risk levels? Clarify how WDOE would regulate or allow any new discharge permits under its anti-degradation policy.

18. Line 866. Clarify if a storm water discharges allows a city to have a single CSO permit, and explain how a large and small city must meet the same concentration limits.

19. Line 1114. Please identify areas where sediment quality is currently good and clarify how the anti-degradation policy protect those areas.

20. Please explain why or why not this rule relates to stream classification, and how WDOE would keep this rule consistent with the protections necessary for cold-water salmon streams that have the most stringent sediment criteria for water quality.

21. Clarify if this rule is intended to apply to in-stream mining.

22. Line 1233. Please clarify WADOE's criteria for dredging or capping as a remedy and criteria for removal rather than simply leaving contamination in place and possibly disturbed in the future.

23. Line 1350ff. Will PAHs other than the ones listed be treated as total PAH, total organics, or some other metric? The rule discusses congeners, but does it also apply to the combined DDT class, or to mixtures such as oil or diesel?

24. Line 1369, Table. The CTUIR believes the maximum criterion for lead should probably be much lower. The state background for lead in soil is around 50 ppm, which is an appropriate target for human health.

25. Line 1369, Table. Is a method for PCB congeners specified rather than an Aroclor method?

26. Line 1532. Please include cumulative impacts criteria for setting sediment standards for individual compounds, and application for addressing total benthic impact. The same comment is relevant for the section beginning at line 1606, and to the human health criteria at line 1638. Is more guidance needed beyond simply saying that levels will be adjusted downward.

27. Line 1956ff. Add government-to-government consultation with affected Tribal Government separate from public notification process.

28. Clarify the role human health risk plays in identifying sites that need remediation. Include a rational to address whether an exceedance of numeric maximum concentrations triggers an evaluation and RI/FS. There needs to be more explanation of the relation of individual maximum criteria to cumulative human health impacts with respect to site identification and screening. This would be roughly equivalent to surface water methods, where

exceedance of individual concentrations or permitted levels can trigger an action that results in lowering the discharge limits based on total risk and not just individual numeric criteria. Human health is not mentioned until line 2234 (setting cleanup goals). Include criteria for cumulative risk to be used to identify sites needing remediation? One rationale would be that cumulative risks could prevent someone's beneficial use (such as fishing).

29. Line 2217. Clarify in plain language whether 'highest cleanup level' mean the most stringent of the listed effects, or the highest allowable concentrations (least stringent cleanup).

30. Line 2290. Please clarify if this is intended to allow a total watershed approach to source control.

31. Line 2338. Please clarify WDOE's treatment of sites where several contaminants (e.g., several metals plus PCBs) do not exceed individual maxima, but pose cumulative risks. This may be the first mention of cumulative (multi-contaminant) criteria, but it applies only to cleanup criteria and not to site identification.

32. Line 2350, Default scenario. Obviously the CTUIR is pleased that tribal consumption is the default assumption. However, there is a significant issue with three provisions, as we have mentioned previously and repeat below.

    a. Line 2358 "(C) The total fish and shellfish in an individual's diet that is obtained, or has the potential to be obtained, from the general vicinity of the site. This value depends on the ability of the aquatic habitat within the general vicinity of the site to support a department approved fish and shellfish consumption rate under current and future site use conditions."

       The default FCR fraction should be 1. Almost sites would have a lower FCR if the carrying capacity were invoked. If a fishing area was used heavily, the average fish take per person would be low, so higher sediment concentrations would be allowed. The FCR fraction should not be used, or that the total abundance should be used to satisfy the whole FCR for a single person before considering how many people use the area. If the FCR is used, the portion of fish that comes from elsewhere should be assumed to be contaminated to some appropriate level such as FDA criteria. Finally, Tribal treaty rights pertain to individual sites no matter how small, as well as broader areas. These rights exist as the right by the tribe, and is not limited to the number of individual member currently able to safely exercise that right. This is especially important when considering the suppressed rates of fish populations and existence of fish advisories.

    b. "(D) The size of the site relative to the fish and shellfish home range."

       Please provide a rational to this statement. It appears that the application of this concept would eliminate protection of anadromous fish, even in spawning areas. Perhaps some species, such as salmon or lamprey, need a special provision, so that at least their spawning and nursery areas are clean. Likewise, marine nurseries such as eel grass beds should be clear as small fish may be more vulnerable than adults.

    c. "(ii) Site-specific scenario. The department may approve an alternate reasonable 2364 maximum exposure scenario for the site in accordance with WAC 173-340-708 and 173-340-702 2365 (14) through (16)."

       Please clarify if this section is related to the on in the previous comment.

33. Line 2374. Please clarify and provide example of how the screening levels and the target risk level would be applied.

34. Please provide further guidance on the use of a BCF and BAF method.

35. Please clarify how WDOE considers stream health (such as an Index of Biological Integrity) when evaluating and testing toxicity, and what watershed methods are included.

36. Please clarify the relationship of Table and Table IV. It would be helpful if WDOE added a column for regional background for both the marine and freshwater sediment tables. Otherwise, please provide criteria for the differing cleanup goals between marine and fresh water, and in what instance are the sediment quality values higher than the McDonald values. Perhaps a supporting technical toxicology document would help.

37. Incorporate guidance for determining whether sites that use capping will be required to resample more frequently than sites that actually remove the contaminated sediment.

Thank you for your consideration of our comments. If you have any questions, please contact Barbara Harper with our Department of Science and Engineering at (541) 429-7435 or me at (541) 429-7400.

Sincerely,

/s/

Naomi Stacy
Lead Attorney
Office of Legal Counsel